



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/791,387	03/03/2004	Hiroaki Takahata	Q80091	3528
23373	7590	09/18/2007		
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037				
			EXAMINER ZEMEL, IRINA SOPJIA	
			ART UNIT 1711	PAPER NUMBER
			MAIL DATE 09/18/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/791,387

Applicant(s)

TAKAHATA ET AL.

Examiner

Irina S. Zemel

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1,3-5, and 7-8, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka '147 in combination with US Patent 4,384,032 to Tashiro et al., (hereinafter "Tashiro") or US 4,638,015 to Bertrand (hereinafter "Bertrand") and further in combination with JP 63-057230 to Dainippon Printing Co, Ltd., (hereinafter "Dainippon").

The rejection stands as per reasons discussed in the previous office action. The amended claim 1 and newly added claim 10 contain limitations that introduce additives, namely, a neutralizer (c), a moisture absorbent (d) (specifically defined in new claim 10) and an inorganic filler (e) into the previously claimed composition. The obviousness of the previously claimed compositions is discussed in the previous office action.

Addition of known fillers for their known function to a polymeric composition would have been obvious for the reasons to impart the final polymeric product with the properties characteristics of that specific filler. For instance, a neutralizer (c), which is defined by the instant specification, for example, as a salt of a stearic acid, is a known co-blowing agent or auxiliary agent that is commonly used in combination with the blowing agent disclosed by Tanaka, as, for example, evidenced by disclosure of cited Tashiro reference, specifically in column 5, lines 30-33. Also, in the same paragraph, Tashiro discloses inorganic fillers such as talc or silica as common nucleating agents routinely used in polymer foaming processes to improve the uniformity of the foams and cell size. See, for example, Tashiro, column 5, lines 33-35.

In addition, incorporation of a known moisture absorbing agent, such as calcium chloride in a polyolefin composition for the reasons to obtain compositions having water barrier properties would have been obvious with reasonable expectation of adequate results as evidenced, for example, by Dainippon expressly disclosing that calcium chloride and other fillers are known moisture absorbing additives for polyolefinic polymer compositions.

The invention as claimed, thus, would have been obvious from the combined disclosure of the cited references and choosing the components that fully correspond to the claimed components and their combinations from the list of expressly disclosed components or their functional equivalents would have been obvious with reasonable expectation of adequate results absent showing of unexpected results.

Claims 6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka in combination with EP 0928805 to Montell North America Inc., (hereinafter "Montell") and further in combination with Bertrand or Tashiro and further in combination with Dainippon.

The disclosure of Tanaka '147 and Montell are discussed in detail in the previous office action as discussed the obviousness of using the claimed blowing agent, i.e., citric acid. The claim limitations of the base claim 1 are discussed above

Claims 1, 3 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka '111 in combination with US Patent 4,384,032 to Tashiro et al., (hereinafter "Tashiro") or US 4,638,015 to Bertrand (hereinafter "Bertrand") and further in combination with Dainippon.

The disclosure of Tanaka '111, Tashiro and Bertrand are discussed in the previous office action. As discussed above, addition of known fillers (expressly disclosed in Tashiro and Dainippon) and for their known function would have been obvious for an ordinary artisan with reasonable expectation of obtaining compositions with the desired properties and reasonable expectation of success.

The invention as claimed, thus, would have been obvious from the combined disclosure of the above cited references with reasonable expectation of adequate results absent showing of unexpected results.

Response to Arguments

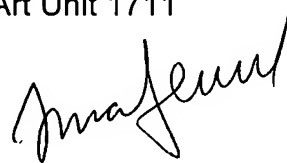
Applicant's arguments filed 5-17-2007 have been fully considered but they are not persuasive. The applicants argue that the references alone or in combination do not disclose the additives as now claimed in the amended claims. This arguments are not persuasive as per discussion above. It is re-iterated once again that incorporation of known fillers in any polymeric composition for its known functionality would have been clearly within the knowledge of an ordinary artisan with reasonable expectation of success and precisely for the reason to introduce the expected and known property to the resulting composition that is associated with each of the known filler/additives.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Irina S. Zemel whose telephone number is (571)272-0577. The examiner can normally be reached on Monday-Friday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571)272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Irina S. Zemel
Primary Examiner
Art Unit 1711



ISZ